EXHIBIT L

WEBTV®
FOR
DUMMIES®
2ND EDITION

by Brad Hill

Contents at a Glance

Chapter 1
What WebTV Is and Isn't

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In This Chapter

▶ Using WebTV instead of a computer

▶ Discovering how WebTV works

▶ Finding out the basics of being a WebTV user

▶ Understanding the Internet and the World Wide Web

▶ Understanding some crucial terms

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*I*f you're reading these words, you have either acquired a WebTV system (congratulations!) or are considering doing so. Either way, you are embarking on a new adventure and are on the frontier of an entirely new technology for connecting people to the digital age. You didn't think it was such a big deal, did you?

The great part is that you don't need to know very much to participate in this exciting development. But it does help to be aware of what you bought and to have answers to a few basic questions. Don't worry, I don't get technical on you — at least not until I get to the part about reverse quantum mechanics.

By the way, in this chapter, I throw in a number of geek-friendly words that you may have heard on the evening news or read in the paper. If you don't know what they mean (or why people are so excited about them), cruise to the section in this chapter titled "Some Words to Know (This Is Not a Test)."

Welcome to a New Era

Long, long ago, in the dark ages of the Internet (that is, before October 1996), the only way to get on the Internet was with a computer. Computers were unusual creatures with strange, troublesome habits. People would buy cute computer puppies, only to watch them grow up into digital monsters,

sharp-toothed and incapable of being housebroken. Well, maybe not that bad. But computers are complicated, no doubt about it, and complications tend to multiply over time, leading to frustration and wasted effort. And the expense: A good multimedia computer that sits on a desk can cost many times as much as a new TV, or five to ten times as much as the cost of WebTV equipment. Portable computers are even more expensive.

WebTV brings a new angle into the picture. With the WebTV Internet terminal or Plus Receiver, complexity and high cost are left in the dust (even though the name *Internet terminal* sounds pretty complex). WebTV is a perfect solution for people who don't care to spend irretrievable hours (days? weeks?) wrestling with stubborn software, finicky modems, and rebellious program upgrades — not to mention people (perhaps the same people) who would rather not gouge their bank accounts for the privilege of being intimidated by a machine.

More than a nifty product, WebTV may have a profound effect on the information age by unlocking the digital doors for nontechnical, practical folks who are interested in the Internet but are understandably unwilling to invest huge amounts of time and money to acquire it. Sound like you? Welcome to the new frontier.

If you're already a computer user (like me), you still have several good reasons why you may have acquired WebTV (again, like *moi*). WebTV isn't just for beginners. Here are a few reasons for computer-literate, technical folks to go for a WebTV system:

- ✔ WebTV is a way to add a second Internet terminal to the house, without investing in a second computer.

- ✔ WebTV brings the Internet into the living room, where groups of people can enjoy it more easily than they could with a computer.

- ✔ Surfing the Web through a TV is fun, perhaps especially for people accustomed to seeing Web images squeezed through a relatively small computer monitor. With WebTV, you can slouch and lounge on your couch instead of hunching over a computer keyboard. Using WebTV seems more recreational than using a computer — and I enjoy it immensely for that reason alone.

- ✔ WebTV Plus is more than an Internet device — it expands television viewing and planning dramatically. It's a great component to add to your TV system, even if you're not sure whether you want the Internet features.

Do I really hate computers?

No, I certainly don't. Although I'm not saying nice things about them in this chapter, I'm irrevocably fascinated by computers, and most of my friends think I spend too much time with them. I own several computers and usually have at least one connected to the Internet at all times. Being on such close terms with computers has given me a heightened appreciation for both the wonder and frustration they inspire.

The point is, WebTV isn't trying to replace computers. It is, however, an alternative to the computer as an Internet vehicle. As such, it solves the two biggest computer problems: difficulty and price. People who enjoy spending all their money for the aggravation (and, admittedly, the rewards) of computers get what they pay for. On the other hand, if you cast your lot with WebTV, it's smooth sailing — right into the digital age.

It's a Bird. It's a Plane. No It's. . . .

WebTV provides the same Internet everybody's talking about, only on your television — without a personal computer. The WebTV system includes a set-top box that sits on top of your television (or somewhere near the TV), a remote control, and an optional wireless keyboard for typing e-mail. (*E-mail* is electronic mail, as you can see in the "Some Words to Know . . ." section near the end of this chapter.) The handheld remote control is all that you need to surf the Web — that is, the World Wide Web — the most dazzling portion of the Internet.

The set-top box of the first version of WebTV is called the WebTV Internet terminal. The Plus box (the second version of WebTV) is called the WebTV Plus Receiver. WebTV Plus has the same functionality as the original WebTV, plus some new features inside the set-top box and in the WebTV Plus Network service. For the most part, the instructions and tips that I give you apply to both the basic and Plus service. When differences exist, I highlight them with icons like the one next to this paragraph. (Cute, isn't it?) WebTV Plus subscribers get an extra Home screen and some extra features that link the Internet seamlessly to television programming — plus a faster modem. The two services — WebTV Classic and WebTV Plus — are dependent on the set-top box, which means that the only way to get WebTV Plus is to have a WebTV Plus Receiver. You can't switch from basic service to Plus service without buying a WebTV Plus Receiver.

For Internet newcomers, WebTV is like a beginner ski slope: gentle and safe. For the experienced *Netizen* (that is, a fine, upstanding member of the Internet community), WebTV offers a recreational alternative to the relatively small, glaring, in-your-face computer screen. For the TV aficionado, WebTV Plus furnishes a great interface between your television, your cable

service (if you have cable), the Internet, and your eyeballs. In either case, WebTV provides everything you need (except for a phone line and a TV set, which you must provide) right from the beginning. The system takes care of all logon details (when you connect to the Internet, you are said to be logging on) — notoriously one of the hardest parts of the Internet for computer users. WebTV also makes the Web, which is inherently chaotic and disorganized, coherent by providing menus, directories, topical selections of great Web sites, and a way to search for what you want.

Although WebTV presents an organized version of the Web, you don't have to stick to WebTV's plan, which is good news for Internet veterans who already know which sites interest them. Most of the World Wide Web is available through WebTV just as it is with a computer. The system even evolves automatically as the Web changes — and the Web is changing at a maddening pace. Technologies and features are invented and incorporated continuously, but you don't have to go to a store to buy new software as a WebTV subscriber: The WebTV Network periodically updates your terminal, enabling it to display the most recent enhancements to the Web.

WebTV updates itself periodically by sending software upgrades through the phone lines and into your set-top box. These upgrades are accomplished at the beginning of a WebTV session — and only when you initiate a log-on. Such software updates can take 15 or 20 minutes, which is inconvenient if you are planning a quick session to get your e-mail, for example. Not to worry — WebTV always asks before beginning the upgrade, and you may always decline it. If you do pass on the upgrade, WebTV continues asking you every time you log on, until you finally accept the download. (This is a good time to clean out the refrigerator.)

WebTV Plus offers a unique type of update — a content update, not a software update. You can set the system to retrieve updated TV listings for your broadcast area (or cable company) every night, automatically. You may also forego the automatic updates and retrieve new listings manually whenever you please. I've put the complete instructions for updating TV listings both automatically and manually in Chapter 5.

WebTV and Computers

So if WebTV isn't a computer, how does it work? Isn't the Internet a computer network? (Yes.) How does WebTV connect to the Internet if it's not a computer?

Good questions, if I do say so myself. The WebTV set-top box is a computing device of sorts but not a personal computer by any stretch. It has circuits inside, just like a computer. But cars have computer circuits in them, and

they aren't computers — neither are microwave ovens. WebTV is a specialty device for getting you on the Internet through your TV. (It can't drive you to the store or cook your dinner, though.) WebTV is neither better nor worse than a computer; it's easier in some ways and lacking in others. Table 1-1 outlines several significant differences between WebTV and personal computers (otherwise known as PCs).

Table 1-1	Differences between WebTV and PCs	
Pros and Cons of WebTV and PCs	**Advantage**	**Disadvantage**
All the software you can ever use comes packaged right in the WebTV set-top box and is automatically updated periodically by the WebTV Network service. There is no such thing as purchasing new software from a store and then adding it to your WebTV system.	The system is hassle-free. You never have to worry about purchasing software upgrades, doing manual installations, or learning about new programs.	You can't play CD-ROM games, but the Web has games of its own, as I describe in Chapter 15.
WebTV is devoted to going online and viewing the Internet. The Plus version of WebTV also provides TV listings and adds picture-in-picture capability to any TV.	WebTV is a dedicated, simple, inexpensive, one-stop answer to anyone who wants to get on the Net.	You can't do word processing, make a spreadsheet, or perform other tasks available on a computer.
WebTV has a built-in modem (the part that you plug your phone line into and that connects to the WebTV Network).	You never have to bother with choosing, installing, configuring, and troubleshooting a new modem (a curse to computer users everywhere).	With WebTV Classic, you can't use connection enhancements, such as ISDN modems, for greater Internet speed. However, just installing ISDN lines for a computer can cost more than a WebTV system.
WebTV upgrades are accomplished automatically, without your having to do anything, know anything, or (perish the thought) open the box.	You don't have to become a computer technician, which may be the last thing on earth you want to be.	You can't make the system faster or better than it is. Fortunately, the system is already fast and good.

(continued)

Table 1-1 *(continued)*

Pros and Cons of WebTV and PCs	Advantage	Disadvantage
WebTV doesn't have a lot of extra component features that add expense and difficulty to your experience. Although you can store letters and pictures in your e-mail box, no hard drive storage exists for collecting software programs. (You can add a printer to any WebTV system.)	The lack of extraneous features keeps WebTV inexpensive and easy to use.	Without a hard drive (the component on computers that stores things) you can't maintain a warehouse of games and other programs on the WebTV Classic system. The WebTV Plus Receiver has a built-in hard drive, but it holds only material sent automatically by the WebTV Network, not personal files.
WebTV is much less expensive than a computer.	You don't have to dip into your child's college fund.	Can you think of one?

ISDN stands for Integrated Services Digital Network, in case you were wondering — something you really don't need to worry about.

How WebTV Works

WebTV is fairly new. The World Wide Web is fairly new. The whole online revolution has taken us all by surprise. So here you have this new device in your home, and you may not have a clue about what you're getting into. Hey, it's not a problem! Most people have a million questions about the Internet and how to get on it, and they don't even know how to begin asking. So I do the asking for you — and the answering, too. (I promise to keep it under a million questions, though.)

Is WebTV the same as cable TV?

WebTV has nothing to do with cable, even though the set-top box looks somewhat like a cable channel box. WebTV Classic doesn't receive cable or TV stations, and the WebTV Classic Internet terminal isn't involved with TV reception. (It doesn't interfere with reception, either.) WebTV works with

WebTV Plus integrates television and the Internet to a greater degree than WebTV Classic, thanks to some special features. The WebTV Plus Receiver can link you directly to Web pages related to the program you're watching. The integration of TV and the Internet may make it seem as if you're watching TV *through* the Web, but in fact you're simply watching TV in the normal fashion *while* surfing the Web. At present, very little special Internet content is embedded in this fashion.

WebTV isn't supposed to replace TV viewing, either — it's meant to enhance it. In Chapter 11, I describe many ways to make the best use of the Internet as a television "channel" that augments regular TV shows.

The big question: Classic or Plus?

The most common question among people shopping for WebTV is whether to go for a basic unit (sometimes called WebTV Classic) or spend the extra money for a Plus system. Many WebTV Classic users also wonder whether to upgrade to Plus. The answer in both cases depends on how much you would value the features bundled into WebTV Plus, most of which are television features as opposed to Internet features. Here's the rundown:

✔ WebTV Plus provides a second Home screen that is all about your television reception and TV programming. (Chapter 5 describes this distinct Home screen.)

✔ WebTV Plus displays TV listings for your area or cable programming from your cable company, complete with brief show descriptions. So you can see, for example, who's on *The Tonight Show* or which *Seinfeld* rerun is on later.

✔ WebTV Plus integrates television programming with related Web sites, eliminating the need for a lot of Web searching when it comes to TV topics. This integration, however, is still somewhat undeveloped, with little crossover content. This feature should get better — more mature — over time.

✔ WebTV Plus lets you keep a small television window in the corner of your screen while surfing the Web, even if your TV doesn't have the picture-in-picture feature.

✔ WebTV Plus has a faster modem, which provides quicker displays of Web sites.

✔ WebTV Classic has one feature — Quickinfo, a customizable news summary — that is missing from WebTV Plus. It's a nice feature, and I describe it unforgettably in Chapter 10.

The upshot is that WebTV Classic is an Internet device that uses your TV, and WebTV Plus is a television device that accesses the Internet. The seamless integration of the TV and the Web that you get with Plus is very cool (you may control the whole shebang from a single handheld remote) but not important if you just want an inexpensive way to get e-mail. Likewise, if you're a pure Web surfer who likes to keep TV and Internet activities separate, go for the basic system.

The World's Briefest Internet Primer

If you've spent some time on the Internet, you don't need to read this section. But if WebTV is your first brush with the online world and you're about to wade into the Internet for the first time, you may wonder just what you are joining. Very few things in this world are both as well publicized and as undefined as the Internet, and even after seeing hundreds of references to it in the news and in magazines, it's easy to wonder, "Just what exactly is this Internet thing?" It's one of the best questions you can ask as you venture into WebTV, and you've come to the right place to get the answer.

The foundation

The Internet consists of millions of computers connected to each other over telephone lines. It is enormous and growing constantly as new Internet computers (called *servers*) are added to the global network. You may be accustomed to thinking of a network as having a centralized hub maintained by whatever organization runs the network. The Internet doesn't work quite as you'd expect, though, because no one owns it or is charged with the responsibility for maintaining it. It is too vast and dispersed to be centralized, and tiny portions of it are owned by whoever installs a server and links it to the Net.

The Internet wasn't built recently, even though it may seem new with its newfound mass popularity. The Internet computer network was started decades ago by the United States Department of Defense. The Net has also long been used by academia to exchange research and information. Because the Internet rides on the shoulders of global telephone cables, it quickly became an international, nonpolitical network.

In the last few years, the existence of the Internet has suddenly caught the imagination of the wider population, which had already become enamored with online computing through services such as America Online, CompuServe, and Prodigy. The Internet is much more enormous than an online service, and at the same time it is much more disorganized. (Remember, no company owns it, so no one whips it into shape.) The Internet is to an online service what the Wild West was to a frontier town.